1 Interview Summaries

1.1 Department of Defense, Veterans and Emergency Management

Interview Type	Personal, State Agency
Interview Location	Camp Keys, Augusta, ME
Interview Date	October 31, 2001
Summary Date	November 13, 2001
Interviewer	CDM / Michelle Thaler (thalerma@cdm.com)
Interviewed:	*Tim Bickford, REM, Environmental Specialist (Timothy.Bickford@me.ngb.army.mil) Building #8, Camp Keys Augusta, ME 04333 207-626-4479 LTC David H. Brandt, Environmental Engineer (BrandtDH@ME-ARNG.NG.army.mil *Larry Harwood, Programmer Analyst, State of Maine, Bureau of Information Services (larry.harwood@state.me.us) (for work with Maine Emergency Management
Staff Size (approx)	1 GIS staff for Defense, 2 from Information Services consulting to MEMA
Budget (approx)	Defense has less than $50,000 covering hardware, software and training for the Environmental office of the National Guard; MEMA has a $124,000 contract with OGIS for a project from 4/1/01 to 3/30/02
URL:	http://www.state.me.us/va/defense/dvs.htm

1.1.1 Overview

The Department of Defense, Veterans and Emergency Management is one state agency that is responsible for three different tasks. Essentially, this department functions like three separate departments, each reporting up a vertical chain of command to their respective federal agencies. The National Guard is part of Defense, and works closely with the National Guard in Washington, DC. MEMA takes its guide from FEMA. Both Defense and MEMA departments were interviewed. Each is summarized separately below. The Veterans division was not interviewed during this project.

1.1.2 GIS Initiatives

1.1.2.1 Overview of GIS Utilization

Defense:

The Maine Department of Defense uses GIS from its Environmental Office. Based at Camp Keys in Augusta, this office uses GIS for hazardous waste management, water resources management, clean air and water and safe drinking water programs and endangered species location.

MEMA:

MEMA is currently contracting work with OGIS to make software recommendations, establish GIS capabilities using Citrix and provide data layers for use at MEMA. Two OGIS staff members are working with MEMA and on-call as part of the Emergency Response team to perform GIS analysis as needed.

1.1.2.2 GIS Operating Environment and Infrastructure

Defense maintains the following software hardware:

- 3 copies of ArcView 3.2 for data development and maintenance
- 1 ArcInfo 8.1
- 1 ArcView 8.1
- Hardware includes:
    - 1 Dell 1.4 gig machine running Windows 2000
    - 1 Desktop PC (550 mhz) running Windows NT
    - WAN connects reserve forces to all National Guard state offices
    - HP 1055, PH 650, HP 405 and Epson 3000 plotters/printers
    - Digiral camera
    - 1 Trimble Geo explorer 3
    - Total Station/RTK base station with survey accuracy

MEMA maintains the following software and hardware:

- 1 ArcView 3.2
- 1 ArcView 8.1 (not yet installed)
- Hardware includes:
    - 1 PC with ArcVierw 3.2
    - 1 new Gateway PC running Windows 2000 (ArcView 8.1 will be loaded on this machine)
    - HP 1055cm in MEMA building
    - Citrix connection
- Hurrivac software is used for hurricane tracking
- Xmap software and data from Delorme; used for routing but the data is based on the 1990 census and is not up-to-date

1.1.2.3 GIS Data Resources and Requirements

1.1.2.3.1 Spatial Data

Defense:

- Data is maintained in UTM Zone 19 NAD83 Meters
- Scale of OGIS data is too small for most Dept. of Defense needs; Defense used GPS to create wetland data
- Additional spatial data comes from a larger National Guard site and is used for mission planning

***MEMA*:**

- Data is maintained in UTM Zone 19 NAD83 Meters (data comes from OGIS)

Existing data sets include:

Basemap features:
Defense:

Have aerials from flight at 1:12,000 – from these some coverages were compiled including:

- Roads
- Streets
- Contours

Facilities area coverage shows buildings

MEMA:
Data developed by OGIS includes:

- E911 roads

Analysis layers include:
Defense:
Soils
Wetlands
Forestry
Facilities area

MEMA:
Data developed by OGIS includes:

- E911 roads
- Armories
- County EMA office locations
- Hospitals
- Municipal fire stations
- Municipal police stations
- Municipal rescue/ ambulance
- Water features

Additional OGIS data layers are available as OGIS staff is part of the MEMA Emergency Management Team
FEMA floodplain maps

Currently unavailable but desired data sets include:
Defense:
Parcels with ownership information for abutters analysis
Watershed boundaries
Resource protection areas
Endangered species habitats
Cultural landmarks for Army Corps Engineering permits
Zoning
Demographics data
1 meter resolution orthos in color
Noise data

MEMA:
Libraries locations

School locations
Water and sewer districts
Airports
Elevation for critical facilities
Potential shelters
Hazardous materials locations
Utility locations
Bus routes
Potential shelter locations
Telephone infrastructure
DOT alternative routes for trucking traffic

1.1.2.3.2 Attribute Data

Defense: Metadata is in Simms Guard Bureau standard

1.1.2.4 GIS Applications and Application Requirements

Defense:
Any application created for the Department of Defense staff should be founded on web-based technology, allowing deployment to the greatest number of staff over the WAN. Applications should require minimal training. Applications should have the ability to integrate National Guard GIS data.

MEMA:
MEMA needs the ability to distribute data to other agencies throughout the state in times of emergency. Any GIS application should facilitate this distribution of data.

Planned future GIS activity and applications:
Defense:
There is no set planned GIS activity. The GIS staff at Camp Keys are investigating the possibility of using ArcExplorer software to allow users access to National Guard data as needed.

MEMA:
MEMA has a memorandum of understanding with OGIS for GIS support, from data development, to applications recommendations and training. Funding for this came from FEMA as a result of follow-up from the 1998 Ice Storm.

- MEMA would like to build a road network using the E911 roads for use in routing and automated vehicle locating.

- MEMA would also like to have elevation data associated with bridges for use in routing during storm events.

- There is a need for data standards that encompass FEMA data standards as well as Maine data standards.

- MEMA could also use GIS to map resource locations including the location of specific equipment and staff resources. GIS could also be used in tracking the Anthrax calls and recording the results of tests.

1.1.3 Other Relevant Issues

***Defense*:**

- Staff is in need of training
- Many staff outside of the Environmental division do not know about the various uses of GIS
- Environmental staff feel there is a need for an organizational wide GIS needs assessment

1.1.4 Major Benefits and Cost Justification

Defense:
The National Guard could use GIS to determine where to build armories, locate recruiting stations and station units. Additionally, GIS could be used for mission planning and facility management. The National Guard makes use of National Guard GIS staff in Washington and other locations around the country for help with GIS questions.

The Maine National Guard would share data that they develop with other state agencies. They would make use of statewide digital orthophotos if they were 1 meter resolution or less. The Maine National Guard would also be interested in statewide parcels with ownership information. This data would be used when abutter's lists are required for land acquisition.

MEMA:
MEMA could use GIS for emergency planning and response to emergency events. GIS could be used in floor planning and tracking, forest fires, ice storms, blizzards and hurricanes. During these types of emergencies, tasks with geographic components such as routing, site location, and proximity analysis would be most efficiently accomplished using GIS technology. Additionally, MEMA has a need to exchange data with other state and municipal agencies. GIS is a tool that could be used to exchange data. This would save time and, during an emergency, save lives.